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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,599	02/06/2002	Ricky Merlc Peterson	ROC920010319US1	8298
46296	7590	07/24/2006	EXAMINER	
MARTIN & ASSOCIATES, LLC			TRUONG, CAMQUY	
P.O. BOX 548			ART UNIT	PAPER NUMBER
CARTHAGE, MO 64836-0548			2195	

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,599

Applicant(s)

PETERSON, RICKY MERLE

Examiner

Camquy Truong

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-14 are presented for examination.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 7-14 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.

3. As to claim 7 recites " a computer –readable signal bearing media" (lines 10-11) and the specification discloses carrier medium as transmission type media such as digital and analog communications links (page 11, lines 15-17). Transmission type media such as digital and analog communications links are incapable of being touched or perceived absent the tangible medium through which they are conveyed; therefore, claim 9 is non-statutory.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

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5. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The claim language in the following claims is not clearly understood:

i. As to claims 1, 4, and 7, lines 12-13, it is not clearly understood whether "a new thread" refers to "additional thread" in line 10.

i. As to claims 12-14, lines 10-13, it is not clearly understood whether "a first thread" and "a second thread" refers to the "new thread " or "additional thread" in claim 1, lines 6-13.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornick (U.S. Patent 6,912,533 B1) in view of Barabash et al. (U.S. Patent 5,293,620).

7. As to claims 1, 4 and 7, Hornick teaches the invention substantially as claimed including: an apparatus comprising:

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a plurality of processors (processor 402A-402N, col. 8, lines 31-33), each processor having the capability of executing a plurality of threads (col. 8, lines 33-36) ;

a memory coupled to the plurality of processors (memory 408, col. 8, line 24);
and

a thread dispatch mechanism residing in the memory and executed by at least one of the plurality of processors (col. 10, lines 60-63; col. 11, lines 16-24), the thread dispatch mechanism determining which of the plurality of processors is busy processing a thread but can accept an additional thread (col. 12, lines 40-42), and which of the plurality of processors cannot accept an additional thread (col. 12, lines 23-26 and lines 43-45) since it is working on a maximum number of threads the processor can execute (the relative busy conditions of the involved computer system may be determined based on a variety factor, for example, the processing load (amount of work assigned) on each computer system, col. 12, lines 44-45) .

8. Hornick does not explicitly teach the thread dispatch mechanism determining which of the plurality of processors are idle, and the thread dispatch mechanism dispatching a new thread to an idle processor, if one exists. However, Barabash teaches the thread dispatch mechanism determining which of the plurality of processors are idle (col. 6, lines 57-60; col. 8, lines 19-21), and the thread dispatch mechanism dispatching a new thread to an idle processor, if one exists (col. 6, lines 61-64; col. 8, lines 45-49; col. 17, lines 48-52).

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9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Hornick and BaraBash because determining which of the plurality of processors are idle, and the thread dispatch mechanism dispatching a new thread to an idle processor, if one exists would dynamically distribute tasks to all available processors to minimize the amount of idle processor time and maximum use of all processors in the system (col. 1, lines 27-48).

10. As to claim 7, it is rejected for the same reason as claims 1, 4 and 7. In addition, Hornick teaches computer-readable signal bearing media bearing the thread dispatch mechanism (col. 17, lines 10-22).

11. As to claims 2, 5 and 10, Hornick teaches if none of the plurality of processors is idle and if at least one of the pluralities of processors can accept an additional thread, the thread dispatch mechanism dispatches the new thread to one of the plurality of processors that can accept an additional thread (col. 11, lines 26-49).

12. As to claims 3, 6 and 11, Hornick teaches if all of the plurality of processors cannot accept an additional thread, the thread dispatch mechanism waits for one of the plurality of processors to complete processing a thread, thereby becoming a processor that can accept an additional thread, and then dispatches the thread to the processor that can accept an additional thread (Fig. 8).

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13. As to claims 8-9, Hornick teaches the computer-readable signal bearing media comprises recordable media (col. 17, lines 10-22).


14. As to claim 12-14, Barabash teaches all processors are made busy with a first thread before dispatching a second thread to any processor (col. 6, line 40 – col. 7, line 14).

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camquy Truong whose telephone number is (571) 272-3773. The examiner can normally be reached on 8AM – 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3756.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).


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SUPERVISORY PATENT EXAMINER
TECHNICAL CENTER 2100